

REMARKS

Introduction

In response to the Office Action dated July 15, 2008, Applicants have amended claim 1. The limitations of claim 9, previously dependent upon claim 1, have been incorporated into claim 1, and claim 9 cancelled. Care has been taken to avoid the introduction of new matter. Claims 16-23 are withdrawn. In view of the foregoing amendments and the following remarks, Applicants respectfully submit that all pending claims are in condition for allowance.

Double Patenting

Claims 1-8, 13-15, 28, and 29 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 6,613,151 ("the '151 Patent") in view of U.S. Patent No. 6,487,986 to Liehr et al. ("Liehr").

Claim 9 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of the '151 Patent in view of Liehr, in further view of U.S. Patent No. 5,904,958 to Dick et al. (hereinafter Dick).

Applicants respectfully request that the Examiner hold these rejections in abeyance until the claims are determined to be otherwise allowable.

Claim Rejections Under 35 U.S.C. § 103

Claims 1-8, 13, 15, 28, and 29 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Helling in view of Liehr.

Claim 9 was not rejected in view of Helling and Liehr, and as the limitations of claim 9 have been added to claim 1, claim 1 should be allowed.

Claims 1-8, 13-15, 28, and 29 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hedgcoth in view of Liehr et al.

Claim 9 was not rejected in view of Hedgcoth and Liehr, and as the limitations of claim 9 have been added to claim 1, claim 1 should be allowed.

Claim 9 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over U.S. Patent No. 5,882,415 to Helling et al. ("Helling") in view of Liehr or over U.S. Patent No. 6,036,824 to Hedgcoth in view of Liehr as both modifications were applied in claims 1-8, 13, 15, 28, and 29, and in further view of Dick.

Applicants traverse.

As previously argued in the Amendment filed January 25, 2008, it is respectfully submitted that the Examiner has improperly rejected claim 9 on the grounds of nonstatutory obviousness-type double patenting. None of the references cited in this rejection share common inventors or assignees with the instant application.

Further, the Examiner applies the teachings of Dick and Liehr to Stirniman on page 13 of the Office Action. As previously argued in the Amendment filed January 25, 2008, the instant application is a Continuation-In-Part (CIP) of Stirniman. Thus, Stirniman does not qualify as a prior art reference under 35 U.S.C. § 102 or 103. Accordingly, the rejection of claim 9 predicated on Stirniman should be withdrawn.

In order to expedite prosecution, Applicants will address the apparent 35 U.S.C. § 103 rejections over Helling in view of Liehr, and further in view of Dick, and Hedgcoth in view of Liehr, and further in view of Dick.

The Office Action acknowledges that the modified apparatus of Helling modified by Liehr and the modified apparatus of Hedgcoth modified by Liehr fail to teach an apparatus

having a plurality of threaded holes into which the plugs are screwed therein. The Office Action relies on Dick in an attempt to cure the admitted deficiencies of the modified apparatus of Helling modified by Liehr and the modified apparatus of Hedgcoth modified by Liehr. The Examiner contends that Dick teaches an evaporator 26 and that an organic monomer enters the evaporation chamber through an inlet 46. The Examiner opines that Dick teaches a nozzle plate 50 that is bolted to the nozzle housing 28 using bolts 58. The Examiner interprets the term "threaded holes" as a matter of product by process, and further asserts that Dick teaches a threaded hole. The Examiner concludes that the apparatus of "Stirniman" as modified by Liehr uses the evaporator of Dick to provide a method of attaching the plugs to the holes.

It is respectfully submitted that when the process by which a product is made *characterizes the final structure*, a process limitation must be given patentable weight *as defining*, in part, an element of the final structure. In other words, if a process limitation defines a functional step that *qualifies* the final structure, then the process limitation is a positive *structural element* of the final structure.

In the instant case, it is respectfully submitted that the claimed limitation "a plurality of *threaded holes into which the at least one primary plug is screwed therein*" characterizes the final structure. In particular, threaded is defined as: a spiral ridge on a screw or other fastener (see, Encarta Online Dictionary © 2008 by Microsoft Corporation (copy attached)).

The claimed subject matter requires a plurality of **threaded holes**. These are structural limitations. Moreover, that structural limitation provides definite functional advantages as previously pointed out. The Examiner simply cannot ignore this claim limitation. *In re Garnero*, 412 F.2d 276, 162 USPQ 221 (CCPA 1969). Thus, the Examiner's conclusion that the "threaded holes" are product by process limitations is *erroneous*.

Although not relied upon to do so, the nozzle 48 of Dick forces the lubricant vapor through the elongate narrow slot opening 60, not through the plurality of primary plugs (col. 5, lines 11-14). Dick describes the plurality of primary plugs (52, 54, 56) as alternating push and pull bolts used to *squeeze* the nozzle 48 and the elongate slot opening 60 of the nozzle (Fig. 3; col. 2, lines 3-7). In col. 5, lines 33-42, Dick states:

In the embodiment shown in FIG. 2, the adjustment bolts comprise alternating "push" bolts 52 and "pull" bolts 54. As shown in FIGS. 3 and 4, the push bolts 52 are threaded into the nozzle housing 28 and bear against the nozzle 48. As the **push bolts 52 are tightened, a closing force is applied to the elongate slot opening 60**. The pull bolts 54 pass through a clearance hole in the evaporation chamber 44 and are threaded into the nozzle 48. A jam nut 64 and flat washer 66 are installed on each bolt to facilitate adjustment. The **pull bolts 54 apply opening force to the elongate slot opening 60** (*emphasis added*).

Dick shows the lubricant vapor traveling from the evaporator 26 to the evaporation chamber 45 through the elongate slot opening 60 of the nozzle 48 (Fig. 5). In Dick, the adjustment bolts adjust the *width of the elongate slot opening of the nozzle*. The vaporized coating material flows through the nozzle, not the adjustment bolts. Moreover, Dick does not form a drilled hole in the interior of each of the adjustment bolts corresponding to the plurality of primary plugs.

Dick fails to disclose or suggest, at a minimum, "...each of said plurality of primary plugs comprises *a drilled hole and two openings*," as recited in amended claim 1.

It is the Applicants' understanding of the Examiner's position that Helling teaches an apparatus for vapor depositing a uniform thickness thin film of a lubricant where a single chamber is replaced by a plurality of plugs of Liehr (first modification), and further replaced with Dick's selection of a plurality of threaded holes (second modification) to provide the claimed subject matter, even though Dick does not suggest plugs having a drilled hole and two openings for supplying a stream of lubricant vapor, as required by amended claim 1. The second

modification of the first modification based on Liehr is required to arrive at the claimed subject matter. This results in a strong indication of a hindsight reconstruction of the claimed subject matter based on the use of the Applicants' disclosure as a template.

Specifically, Liehr teaches a plurality of plugs having two openings, however, Dick *teaches away* from a lubricant vapor source comprising a plurality of plugs each having a drilled hole and two openings where the drilled hole substantially extends the length of the interior of each primary plug for transporting the stream of lubricant vapor, so there is no basis for alleging obviousness thereof. In Dick, the alleged plugs are used for exerting pressure on the nozzle, not for transporting the stream of lubricant vapor. Therefore, a person skilled in the art would not be motivated to modify Helling's apparatus based on the teachings of Liehr, and then, modify Helling's modified apparatus based on the teachings of Dick.

As, Helling, Liehr, and Dick do not disclose the same apparatus for vapor depositing a uniform thickness thin film of a lubricant as disclosed by the present inventors, Helling, Liehr, and Dick do not suggest the apparatus, as required by amended claim 1.

With respect to the apparent 35 U.S.C. § 103 rejection over Hedgcoth in view of Liehr, and further in view of Dick, Liehr teaches a plurality of plugs having two openings, however, Dick *teaches away* from a lubricant vapor source comprising a plurality of plugs each having a drilled hole and two openings where the drilled hole substantially extends the length of the interior of each primary plug for transporting the stream of lubricant vapor, so there is no basis for alleging obviousness thereof. In Dick, the alleged plugs are used for exerting pressure on the nozzle, not for transporting the stream of lubricant vapor. Therefore, a person skilled in the art would not be motivated to modify Hedgcoth's apparatus based on the teachings of Liehr, and then, modify Hedgcoth's modified apparatus based on the teachings of Dick.

As, Hedgcoth, Liehr, and Dick do not disclose the same apparatus for vapor depositing a uniform thickness thin film of a lubricant as disclosed by the present inventors, Hedgcoth, Liehr, and Dick do not suggest the apparatus, as required by amended claim 1.

Dependent claims 2-8, 10-15, 28, and 29 are allowable for at least for the same reasons as independent claim 1 and further distinguish the claimed apparatus.

Withdrawal of the foregoing rejections is respectfully requested.

Conclusion

In view of the above amendments and remarks, Applicants submit that this application should be allowed and the case passed to issue. If there are any questions regarding this Amendment or the application in general, a telephone call to the undersigned would be appreciated to expedite the prosecution of the application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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